

Product name: PLS62-W
 Manufacturer: TRIMBLE EUROPE BV
 FCC Id: NZI-120271

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2} \quad (\text{formula 1}) \qquad PG = \frac{(Ed)^2}{30} \quad (\text{formula 2})$$

where: S = power density
 P = power input to the antenna
 G = power gain of the antenna in the direction of interest relative to an isotropic radiator
 R = distance to the center of radiation of the antenna

PG = Effective Isotropic Radiated Power (EIRP)
 E = Electric field measured at distance R distance
 d = measurement distance

Transmitter n°1d (LTE Band 12)

FCC ID: NZI-120271 Maximum peak output power at the antenna terminal: 25,00 (dBm)
 Maximum peak output power at the antenna terminal: 316,227766 (mW)
 Antenna gain(typical): 2 (dBi)
 Maximum antenna gain: 1,584893192 (numeric)
 Prediction distance: 20 (cm)
 Prediction frequency: 716 (MHz)
 MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310): 0,477333333 (mW/cm²)
 Power density at prediction frequency: 0,099708 (mW/cm²) (formula 1)

Transmitter n°1e (LTE Band 18)

FCC ID: NZI-120271 Maximum peak output power at the antenna terminal: 25,00 (dBm)
 Maximum peak output power at the antenna terminal: 316,227766 (mW)
 Antenna gain(typical): 5,15 (dBi)
 Maximum antenna gain: 3,273406949 (numeric)
 Prediction distance: 20 (cm)
 Prediction frequency: 815 (MHz)
 MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310): 0,543333333 (mW/cm²)
 Power density at prediction frequency: 0,205935 (mW/cm²) (formula 1)

Transmitter n°1f (LTE Band 19)

FCC ID: NZI-120271 Maximum peak output power at the antenna terminal: 25,00 (dBm)
 Maximum peak output power at the antenna terminal: 316,227766 (mW)
 Antenna gain(typical): 5,15 (dBi)
 Maximum antenna gain: 3,273406949 (numeric)
 Prediction distance: 20 (cm)
 Prediction frequency: 830 (MHz)
 MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310): 0,553333333 (mW/cm²)
 Power density at prediction frequency: 0,205935 (mW/cm²) (formula 1)

Transmitter n°2 (Bluetooth: 2402-2480 MHz)

FCC ID: Z64-WL18DBMOD Maximum peak output power at the antenna terminal: 12,20 (dBm)
 Maximum peak output power at the antenna terminal: 16,59586907 (mW)
 Antenna gain(typical): 3,2 (dBi)
 Maximum antenna gain: 2,089296131 (numeric)
 Prediction distance: 20 (cm)
 Prediction frequency: 2402 (MHz)
 MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310): 1 (mW/cm²)
 Power density at prediction frequency: 0,006898 (mW/cm²) (formula 1)

Transmitter N°1d + Transmitter N°2 : [Pd(1d)/LPd(1d)] + [Pd(2)/LPd(2)] = 0,22 <1
 Transmitter N°1e + Transmitter N°2 : [Pd(1e)/LPd(1e)] + [Pd(2)/LPd(2)] = 0,39 <1
 Transmitter N°1f + Transmitter N°2 : [Pd(1f)/LPd(1f)] + [Pd(2)/LPd(2)] = 0,38 <1